

## ABSTRACT OF THE DISCLOSURE

A method and apparatus for alignment of TDM-based signals for packet transmission using framed and unframed operations are described. In an embodiment, a line card in a network element includes a deframer unit that receives a Time

- 5 Division Multiplexing (TDM) signal. The TDM signal includes a payload and overhead data. The deframer generates frame alignment data based on the overhead data. The line card also includes a packet engine unit coupled to the deframer unit. The packet engine unit receives the payload, the overhead data and the frame alignment data and generates a number of packet engine packets. The packet engine
- 10 packets represent a frame within the TDM signal such that the packet engine packets include the payload, the overhead data and the frame alignment data. Additionally, the line card includes a packet processor coupled to the deframer unit. The packet processor receives the packet engine packets and generates network packets based on the packet engine packets.